

COMMISSION WORKSHOP  
BEFORE THE  
CALIFORNIA ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION

In the Matter of:	)
	) Docket No.
AB-1632 Nuclear Power Plant	) 07-AB-1632
Assessment	)
_____	)

CALIFORNIA ENERGY COMMISSION  
HEARING ROOM A  
1516 NINTH STREET  
SACRAMENTO, CALIFORNIA

WEDNESDAY, DECEMBER 12, 2007

9:08 A.M.

Reported by:  
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PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMISSIONERS PRESENT

James D. Boyd, Vice Chairperson  
State Liaison Officer to the Nuclear Regulatory  
Commission

John L. Geesman

Jeffrey D. Byron

ADVISORS PRESENT

Gabriel D. Taylor

Suzanne Korosec

STAFF and CONSULTANTS PRESENT

Barbara Byron, Project Manager

Chris Tooker

Karen Griffin

Michael Jaske

Eugenia Laychak

Steve McClary  
Heather Meta  
MRW & Associates

David Johnson  
ABS Consulting

Suzanne Phinney  
Aspen Environmental Group

ALSO PRESENT

Gary L. Schoonyan  
Southern California Edison Company

Patrick W. Mullen  
Pacific Gas and Electric Company

ALSO PRESENT

Scott Galati, Attorney  
Galati & Blek, LLP

Rochelle Becker  
Alliance for Nuclear Responsibility

Scott L. Fielder, Attorney  
Fielder, Fielder and Fielder

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## P R O C E E D I N G S

9:08 a.m.

VICE CHAIRPERSON BOYD: Good morning.

Let's start this proceeding. I'd like to welcome all of you to this morning's workshop to review the draft study plan that's been prepared for the AB-1621 nuclear power plant assessment.

As the nametag says, I'm Jim Boyd, the Vice Chair of the Energy Commission and State Liaison Officer to the Nuclear Regulatory Commission. Put that all together, I guess that's why I end up chairing this because we don't have a specific committee to deal with this subject. Obviously I do preside over nuclear power and nuclear waste issues at the Energy Commission.

To my left is Commissioner Geesman, and his Advisor to his left, Susan Korosec. To my right is Commissioner Byron and his Advisor, Gabriel Taylor.

Commissioner Geesman and I constituted the 2005 Integrated Energy Policy Report Committee, which was the first group to take up the subject of nuclear power in California in 25-plus years, they told us. And he has remained on the Integrated Energy Policy Report Committee.

1 I, having served my tour of duty of  
2 three years, and of course, ever since that 2005  
3 report, nuclear power has been on our agenda.  
4 And, of course, the 2007 Integrated Energy Policy  
5 Report, which he directed and was just approved by  
6 this full Commission last week. And each of those  
7 reports are backed up by lengthy reports on the  
8 subject of nuclear power and all that it means in  
9 California. Particularly the findings regarding  
10 waste disposal.

11 It was really the, we'd like to think,  
12 anyway, it was the findings and recommendations in  
13 the 2005 Integrated Energy Policy Report about  
14 nuclear power and waste disposal that led to the  
15 direction we perceived from the Legislature that  
16 is embodied in AB-1632.

17 And I'm always delighted to run into  
18 Assemblyman Blakeslee in the hall of the Capitol  
19 because he carried the IEPR around like it was the  
20 Bible for months and months and months. And  
21 that's quite encouraging, because sometimes the  
22 silence about that report has been deafening to  
23 some of us up here. So it was good to see a  
24 legislator, indeed, paying attention to a policy  
25 report.

1           Of course, this law was signed into  
2       effect in 2006. It directs the Energy Commission  
3       to complete and adopt an assessment related to  
4       California's operating nuclear power plants by  
5       November 2008.

6           Today we're offering the opportunity to  
7       stakeholders and members of the public to comment  
8       on the draft study plan, as I indicated, and the  
9       scientific studies that will be included in the  
10      1632 assessment.

11          We're not here today to debate the pros  
12      and cons of nuclear power. I would add this is  
13      becoming nuclear power week for some of us, there  
14      having been a legislative hearing in San Diego day  
15      before yesterday on the subject, which probably  
16      did debate the pros and cons a little bit more.

17          But in any event, we're not here to  
18      debate the pros and cons of nuclear power, but to  
19      focus on the draft study plan that we've been  
20      directed to carry out, you know, to get ourselves  
21      assured that it meets the requirements of AB-1632.

22          We're going to begin the process with  
23      presentations by Barbara Byron and Steve McClary,  
24      who are the project leaders for the AB-1632  
25      assessment. Barbara Byron is our senior nuclear

1 policy advisor and then my key advisor on this  
2 subject. And our only nuclear policy advisor.  
3 And she and I are the staff of one and a fraction,  
4 she being the one that spends a lot of time on the  
5 subject. And she's indispensable to me and to  
6 this agency. So I'm pleased she's here to work  
7 with our friend, Steve, on this subject.

8 She's going to make -- they're going to  
9 make some introductions, and then we'll turn it  
10 immediately over to comments from the public.  
11 And, again, as I say, we ask that your comments  
12 focus on the draft study plan.

13 With that, I'd like to ask my fellow  
14 Commissioners if they'd like to make any  
15 introductory comments. Commissioner Byron, I know  
16 you said you had a comment or two.

17 COMMISSIONER BYRON: If I may, just  
18 because I can only stay for the first hour. I  
19 just wanted to add a few items to Commissioner  
20 Boyd's comments. Of course, these gentlemen have  
21 been working on this issue for awhile, and I'm  
22 relatively new to the Commission.

23 I think this is a very important piece  
24 of work. It's a thoughtful bill that Senator  
25 Blakeslee has given us, and the goal --



1                   VICE CHAIRPERSON BOYD:  You promoted  
2                   him.  He's only an Assemblyman.

3                   COMMISSIONER BYRON:  I'm sorry,  
4                   Assemblyman, of course.  And I wonder why he  
5                   carries that IEPR around all the time.

6                   VICE CHAIRPERSON BOYD:  He's a smart  
7                   man.

8                   COMMISSIONER BYRON:  It's an important  
9                   bill that the Assemblymember has given us with an  
10                  important goal for helping determine California's  
11                  energy future.

12                 And, of course, without getting into the  
13                 debate of new nuclear, we do have four operating  
14                 plants in this state.  And it exists as a  
15                 significant part of our energy portfolio.

16                 So the requirements to look at the  
17                 vulnerabilities of these large plants due to  
18                 seismic issues and plant aging and waste  
19                 accumulation, I think, are extremely important.

20                 It's also important to me from a  
21                 personal point of view because I have a masters in  
22                 seismic engineering, and I've worked in the  
23                 nuclear industry a little bit.  And I've also  
24                 worked on nuclear plant life extension for about  
25                 five years, having produced a number of reports on

1 plant aging.

2 I'm very interested in the subject, and  
3 I hope to be able to contribute in some way when  
4 we get to the point of reviewing this work.

5 So I'd like to encourage our contractors  
6 that there's a great deal of material available  
7 that we hope you'll use. But most importantly  
8 what we're looking for is your synthesis of what  
9 this all means. Particularly with regard to  
10 California. And that's, certainly, I think,  
11 what's on the mind of this Commissioner.

12 I'll stop there. I apologize, Barbara  
13 to -- by the way, Ms. Byron and I are not related.  
14 I met her when I came to the Commission. Well, we  
15 might be. I think we determined we might have  
16 some connections from Pennsylvania many years ago.

17 So I apologize, Commissioners, I can  
18 only be here for the first hour, but I look  
19 forward to what I'll learn during that time.  
20 Thank you.

21 VICE CHAIRPERSON BOYD: Thank you for  
22 being here, and we appreciate the fact you've had  
23 some experience in this arena.

24 Barbara.

25 MS. BYRON: Thank you, Commissioners.

1 Good morning. My name is Barbara Byron and I'm  
2 the Project Manager for the AB-1632 nuclear power  
3 plant assessment. And I'd like to welcome all of  
4 you this morning.

5 Just a few housekeeping items that we're  
6 required to give you before we begin. For those  
7 of you not familiar with this building the closest  
8 restrooms are located just behind the elevator and  
9 to the left of these double doors.

10 There's a snack bar on the second floor  
11 under the white awning. And lastly, and most  
12 importantly, in the event of an emergency and the  
13 building is evacuated, you're to follow the  
14 employees to the appropriate exits. And we will  
15 reconvene at the park katty-corner from the Energy  
16 Commission. Please proceed calmly and quickly,  
17 again following the employees with whom you are  
18 meeting. Thank you.

19 Let's begin with just a brief  
20 introduction on AB-1632. The topics I'm going to  
21 cover begin with the workshop objectives and what  
22 we hope to accomplish this morning. A little bit  
23 about the requirements in AB-1632. And then I'll  
24 move to describing our study team and our  
25 approach. And then we'll go over the schedule and

1 public comment periods, opportunities for  
2 commenting.

3 And then I wanted to provide, finally, a  
4 little bit of information about this morning's  
5 workshop.

6 The purpose of this workshop, as  
7 Commissioner Boyd mentioned, is to receive  
8 comments on the draft study plan that conforms to  
9 the AB-1632 framework and requirements.

10 Also, we plan to receive input on the  
11 scientific studies to be reviewed as part of the  
12 assessment. And we want to inform parties of the  
13 schedule, planned deliverables and opportunities  
14 for public comment.

15 Just a brief description of AB-1632. It  
16 requires the assessments of the potential impacts  
17 to the state from relying on large baseload power  
18 plants. These assessments are to be completed as  
19 part of the Integrated Energy Policy Report  
20 process, and adopted by the Energy Commission by  
21 November 1, 2008.

22 These assessments will include the  
23 vulnerability of the nuclear plants to a major  
24 disruption caused by a large seismic event or  
25 plant aging. It will include an assessment of

1 potential impacts of such a disruption on system  
2 reliability, public safety and the economy.

3 It will include an assessment of the  
4 costs and impacts from nuclear waste accumulating  
5 onsite at Diablo Canyon and San Onofre. And it  
6 will also look at a few other major policy issues  
7 related to the future role of these plants in  
8 California.

9 The scope of the study is focusing on  
10 Diablo Canyon and San Onofre only. New reactors  
11 and out-of-state reactors are not part of these  
12 assessments. The primary focus will be on system  
13 reliability and economic impacts for California.  
14 But it will not be a general appraisal of nuclear  
15 power.

16 And the study will be based on existing  
17 scientific studies. We don't plan to -- we don't  
18 have the budget or the people to put together new  
19 studies. It will focus on compiling and examining  
20 existing scientific studies.

21 Three consultant reports major products  
22 will result from this assessment. First, there  
23 will be a consultant report. Second, there will  
24 be an Energy Commission AB-1632 staff report. And  
25 then finally there will be a section in next

1 year's 2008 IEPR update report.

2 And these reports all will be posted at  
3 our website, that are listed here. And we have a  
4 docket number, 07-AB-1632.

5 A little bit about our study team. The  
6 Energy Commission Staff study team, some of them  
7 are here with us. They include Karen Griffin,  
8 who's at the table. And Chris Tooker, who's also  
9 here. It also will include Mike Jaske and Eugenia  
10 Laychak, who's also at our table.

11 And then the technical -- and another  
12 important component of this study will be a  
13 technical advisory team, which will include people  
14 from the Public Utilities Commission, California  
15 ISO, and we have formed a seismic vulnerability  
16 advisory team. And it includes representatives  
17 from the California Department of Conservation,  
18 the Seismic Safety Commission, the California  
19 State Geologist, the California State Seismologist  
20 and others.

21 And then third, we have the consultant,  
22 MRW and Associates is the prime contractor. And  
23 their team includes ABS Consulting, Aspen  
24 Environmental Group, Global Energy decisions, and  
25 Eller, Stone D'Paul.

1           Our estimated schedule is, first of all  
2           an important date is December 21st, because that  
3           will be the deadline for written comments on the  
4           draft study plan. Next month, January, we'll be  
5           releasing the final study plan and posting it on  
6           our website, and beginning the research. In June  
7           we plan to release the draft consultant report.

8           Highlighted in red are the opportunities  
9           for public comment. And the next opportunity for  
10          public comment will be June/July timeframe, when  
11          we will receive comments on the draft consultant  
12          report.

13          In August we'll release the draft Ab-  
14          1632 staff report. And in August, again, we'll  
15          hold the public workshop on the draft staff  
16          report. August and September, the comment period  
17          on the draft staff report. And in September we'll  
18          release the final consultant and staff reports.

19          Finally, in October the Commission will  
20          adopt the staff report. And then November/  
21          December timeframe it will be included as part of  
22          the 2008 IEPR update report.

23          Today's agenda includes first some  
24          preliminary and introductions by myself and by  
25          Steve McClary with MRW. And then we'll move

1 quickly to public comments. And we hope to  
2 adjourn before noon.

3 And for those participating this  
4 workshop is being broadcast over the internet.  
5 The call-in participation number is 888-889-1957.  
6 The passcode is AB-1632. The call leader is  
7 myself, Barbara Byron. And for any of you who  
8 have not filled out blue cards, please do so.  
9 They're out at the entrance. And those wishing to  
10 speak this morning, if you fill out a card you'll  
11 be included.

12 And with that I'd like to introduce  
13 Steve McClary. He's the principal and one of the  
14 cofounders of MRW and Associates. And he's the  
15 project lead for the consultant study.

16 MR. MCCLARY: Thank you, Barbara. Good  
17 morning to the Commissioners. It's good to see  
18 you. It's good to be back here working on this  
19 issue with the Commission.

20 I think what you've heard already from  
21 the Commissioners and from Barbara describes the  
22 setting in which this assessment is taking place.  
23 What's different this time around from the nuclear  
24 policy overview work that's been done as part of  
25 the last two IEPR cycles is really the focus.



1           Assemblyman Blakeslee's bill really  
2       directs us in some very specific areas. As has  
3       been mentioned, we're looking at the existing  
4       plants in California. And with a focus on some  
5       specific technical issues.

6           It's for that reason that we have a  
7       different kind of team approach that we're taking  
8       here. We felt that it was important to bring in  
9       some of the specific technical expertise that  
10      would help us respond to those areas that we're  
11      directed to look at in the bill. That's why we've  
12      got ABS Consulting that has a lot of background  
13      and experience in seismic analysis and  
14      engineering, as well as plant aging issues, in  
15      general, and risk assessment.

16           And we also have Aspen Environmental  
17      Group with us today, Suzanne Phinney, to look  
18      environmental impacts and economic impacts at the  
19      local level, which is also an aspect of AB-1632  
20      that's been brought out.

21           The draft study plan which was posted, I  
22      believe, last week or the week before on the  
23      Commission's website is kind of the -- it's the  
24      gameplan for how we're going to proceed over the  
25      next year to achieve and write and publish the

1 reports that Barbara described:

2 The consultant report underlying the  
3 Commission's evaluation. The AB-1632 staff  
4 report. And then the finding that will be in the  
5 2008 IEPR update.

6 To do that there are five areas of  
7 technical assessments that we'll be focusing on:  
8 seismic vulnerability. Vulnerability of the  
9 plants and their reliability that might be  
10 impacted by the aging of the plants; they are  
11 older plants so they'll obviously continually  
12 replaced major components. This is an issue with  
13 nuclear plants around the country, just what has  
14 been the impact as they've gotten older.

15 Given the, you know, an assessment of  
16 what the likelihood or nature of a major  
17 disruption, meaning an outage of these plants for  
18 some significant amount of time, what does that  
19 imply for the reliability of the electric system  
20 and our resource system in California.

21 An issue that continues to be before the  
22 Commission. What is the impact of the  
23 accumulation of spent fuel at the reactor sites.  
24 And what does that imply for the continued  
25 operation of these plants.

1           And then, again, as Barbara said, there  
2       are a couple other policy issues that we've been  
3       asked to look at.

4           The draft study plan also lists some of  
5       the kinds of studies that we will be reviewing --  
6       compiling and reviewing as part of this work. As  
7       Barbara said, the focus here is on gathering an  
8       assessing and synthesizing, as Commissioner Byron  
9       said, the existing body of work that's out there,  
10      which is really very extensive.

11          We're not looking to do original  
12      research, original modeling. We're looking at  
13      what's out there, what do we know and what does it  
14      mean for these plants.

15          The study plan includes for each of  
16      these tasks representative examples of the kinds  
17      of studies we're looking at. And I want to be  
18      clear that the lists that you'll see in that draft  
19      study plan are not intended to be exhaustive lists  
20      of everything that we intend to look at. But  
21      examples of the sorts of studies. In some cases,  
22      rather specific examples, of the sorts of studies  
23      that we intend to look at in connecting this  
24      study.

25          All of these focus on what I see as kind

1 of three key areas that these technical studies  
2 look at. How vulnerable are SONGS and Diablo  
3 Canyon to long-term disruptions, and the specific  
4 areas that are identified in the bill, or the  
5 specific issues that can cause that.

6 What are the impacts of that kind of an  
7 extended outage on California for reliability,  
8 replacement power and local impacts.

9 And then what about the accumulation of  
10 spent fuel at the plants.

11 So, turning to some of those specific  
12 issues that we'll be looking at. Seismic  
13 vulnerability. We'll be looking at the studies,  
14 again, on what magnitude of earthquake or tsunami,  
15 if that's a credible event, as well.

16 Could plants sustain? What can they  
17 take without it actually causing a major  
18 disruption. How large of these events should we  
19 anticipate can be anticipated, and the frequency,  
20 as well.

21 And what are the reliability impacts of  
22 those kinds of events. And to the extent  
23 ascertainable, of different magnitudes, you know,  
24 an earthquake could have lesser or greater impact  
25 on the plant and associated facilities. I think

1       this is a point that's already been raised for us,  
2       that we will need to look at not just the reactor,  
3       itself, but associated facilities at the plants,  
4       and the impact of major events on those. Things  
5       like substations, transmission facilities and so  
6       on.

7               To do that we'll be looking at what the  
8       current scientific understanding is of seismic  
9       faults in the region of both the plants. And also  
10      an issue that's come to the fore, particularly  
11      since the most recent earthquake in Japan, the  
12      implications of thrust vaulting versus slip-strike  
13      faulting and how those might differ or not, and  
14      the extent to which that's being considered.

15             Seismic design elements for major plant  
16      components. As I said, how resistant are they  
17      designed to be. What's the experience telling us,  
18      to the extent that we have it up through the most  
19      recent experience in Japan.

20             Similarly, the impact of those on  
21      critical plant components. Cumulative plant  
22      damage. And then probability of ground motion  
23      levels that would exceed the limits that these are  
24      designed for. And what the implications of that  
25      would be.

1           Plant aging is another issue that  
2           obviously comes to the fore as the fleet of  
3           nuclear plants in this country and overseas does  
4           get older. Most of the plants running now have  
5           reached the 20-, 30-year lifetime. Work has been  
6           done over the years to upgrade and refurbish and  
7           maintain those plants.

8           Are we running into, with the experience  
9           that we have in other parts of the country or the  
10          world, as the plants get older, that tells us  
11          something that we should be aware of or plan for  
12          in California. What's the current state of these  
13          plants in California. How well have they been  
14          kept up, you know. Are there any causes for  
15          concern there.

16          And again, the focus being are there  
17          likely to be long-term outages at the California  
18          plants. And another area that we will try to  
19          ascertain here, is if there are incidents related  
20          to plant aging at facilities in other parts of the  
21          country or the world that then come back and have  
22          repercussions for the plants in California. What  
23          should we be aware of; what can we try to  
24          anticipate in that area.

25          This is reflecting -- the past and most

1 prominent example of that kind of impact has been  
2 more in plant safety issues where specific  
3 incidents at plants in other parts of the country  
4 or the world have prompted the need for retrofits  
5 or changes at existing plants to prevent similar  
6 incidents here. And what does that imply, you  
7 know. Will they be down for awhile. Is it  
8 something that can happen at the next refueling  
9 cycle, that kind of issue.

10 So we'll be looking at, again, these are  
11 more the specific areas of investigation within  
12 that task, plant performance, extended plant  
13 outage, major plant components. Often those are  
14 cases of components that are not so readily  
15 replaceable on a regular schedule. You know, some  
16 will say that many nuclear plants, they're like  
17 our bodies, you know. A lot of the equipment that  
18 you see there today is new equipment, as compared  
19 to what was there originally. But some of those  
20 major plant components are less likely to have  
21 been replaced over the years.

22 The most obvious example to date for  
23 both the plants in California would be the steam  
24 generator systems, which are being replaced as  
25 they reach the end of their lifetime.

1           We'll also be trying to look at what the  
2 trends are in radio-isotope detection, both  
3 outside and also within the plant. This is  
4 important, keeping track of exposures, worker  
5 safety, that kind of thing. And the extent to  
6 which that's an indicator of plant performance.

7           Safety culture and maintenance practices  
8 has been a key issue. And it's risen to the fore  
9 at some other plants moreso than in California.  
10 But we're trying to understand what lessons there  
11 may be for the California plants.

12           A prime example in this case would  
13 actually be the Palo Verde nuclear plant, where  
14 the concern has been, and the management of the  
15 plant is addressing the issue of whether the  
16 safety culture has been maintained at the plant in  
17 such a way that workers are willing to step  
18 forward as issues need to be identified. And that  
19 they are properly identified and acted on.

20           There's also an associated area of the  
21 workforce in the nuclear industry over time. Are  
22 we training and bringing in, giving the experience  
23 to new staff at the facilities as the workers, in  
24 many cases, workers who've been there for many  
25 years at these plants reach retirement age. And



1 we want to be sure that we don't lose the  
2 experience and the knowledge that those workers  
3 have. And that, in fact, we are bringing on  
4 suitably trained new people to take their places.

5           Given the topic of -- these two general  
6 topic areas of issues that could affect the  
7 performance or create disruptions or outages of  
8 the plants, what would be the implications. And  
9 that's kind of a different topic than looking at  
10 the plants, themselves, but look at what their  
11 reliability history has been; what would be the  
12 impact on the rest of the system; can we replace  
13 the power if one of the plants or both of the  
14 plants were to shut down for an extended period of  
15 time. That obviously will depend on how long an  
16 outage you would be looking at. What kinds of  
17 replacement power considerations you might have.

18           And also what are the potential  
19 implications of extending the plants' licenses,  
20 which is an issue that will be arising in the next  
21 five to ten years, given the uncertainties about  
22 future costs and reliability of the plants, to the  
23 extent we can really understand those  
24 uncertainties.

25           So there we'll be looking at what has

1       been the performance, the reliability; and what  
2       will be -- what would be the impact of an extended  
3       outage on the electric systems reliability  
4       overall.

5               The transmission system, in particular,  
6       you know, we've known for a long time this is an  
7       issue for SONGS, which is very centrally located  
8       in the southern California transmission system.  
9       And the ISO has raised this concern. And, as  
10      Barbara said, the ISO is part of our advisory team  
11      overlooking all of this.

12             Planning reserve margins. They're a  
13      substantial part of the resource system. And an  
14      outage at both those plants in particular would  
15      have an impact on what our planning reserves are  
16      within the state. Public safety; local economy;  
17      economic impacts; environmental impacts of what  
18      would happen as a result of such an outage.

19             Costs and availability of replacement  
20      power. We will be looking at that. The focus  
21      there, our preliminary approach to that is to look  
22      at production simulation and modeling work that's  
23      been done, rather than do another separate series  
24      of modeling efforts to model the system.

25             That may need to be supplemented

1 somewhat with some additional modeling of specific  
2 scenarios here, but that hasn't been determined  
3 yet. And we, to the greatest extent possible,  
4 we'll rely on already-performed work rather than  
5 original, new modeling work.

6 And then the implications of the license  
7 extensions, aside from the statewide there's  
8 also -- we will look at what the impact of  
9 extending the licenses or not extending the  
10 licenses will be on local economies.

11 Nuclear waste accumulation is an issue  
12 that has actually been addressed in the overviews  
13 in the last two IEPR cycles. And in many respects  
14 this is an ongoing update on this issue that the  
15 Energy Commission has examined.

16 We continue to accumulate spent fuel at  
17 the sites. And what are the plans which seem to  
18 fall back by at least two years every two years  
19 when we look at it, if not longer. What are the  
20 implications of keeping that on the site.

21 As opposed to the implications of moving  
22 it, particularly given the situation we're in now  
23 where you would move it to is not something that  
24 we know. There isn't a destination to move it to.  
25 And so the question today is with that spent fuel

1 are you better off leaving it in place until you  
2 have a place to put it; or do you move it now and  
3 perhaps have to move it again.

4 And we will again look at the federal  
5 government's efforts to develop a place to put  
6 that fuel, and to move it offsite. This is, as I  
7 said, something that we've looked at in the past.  
8 And this is more in the nature of an update on  
9 where they are since last year.

10 So these are some of the areas that  
11 we'll be looking at again and updating on that,  
12 how much there is, what is being done with it  
13 onsite, what you do if you need to move it, and  
14 what the federal government is doing to live up to  
15 its commitments to take that fuel from reactor  
16 operators.

17 Other policy issues. The key ones that  
18 we're looking at here that we've been directed to  
19 look at in the bill, would be first, what are the  
20 implications if you were to replace the nuclear  
21 plants because of an extended outage or for  
22 whatever reason. What are the alternatives and  
23 what would be the implications of doing that.

24 And then along with that, are they  
25 viable; can you really do that. Part of that

1 viability, an implications assessment, is a  
2 question that comes up again and again. Which is  
3 the lifecycle costs and environmental impacts.

4 There has been a body of work done on  
5 this. There's more being done. As I said, we're  
6 not going to do original research in this area.  
7 But I think we've found in the last nuclear policy  
8 overview that the work done on lifecycle impacts  
9 is scattered; it's hard to get on an apples-to-  
10 apples basis. And we're going to take another cut  
11 at trying to do that. Clarifying some of that  
12 work; investigating it; and putting more of a  
13 comparable assessment together of what are the  
14 full lifecycle or cradle-to-grave kinds of impacts  
15 of the different resources.

16 This obviously has come up in the  
17 context of greenhouse gas emissions issues and the  
18 relative contribution of different electric  
19 generation technologies to the generation of  
20 greenhouse gases.

21 We'll also be looking at these other  
22 issues that are again, kind of ongoing parts of  
23 the nuclear assessment that this Commission has  
24 supported. Whether the costs associated with  
25 nuclear power, do we need to be concerned about

1 increases or changes in fuel costs. The  
2 implications of changes in security requirements.  
3 The implications of personnel replacement and  
4 training issues.

5 Local economic impacts of nuclear power  
6 plants. This has been an ongoing issue as far as  
7 the contribution to local economies and state and  
8 local tax bases. And then what the potential  
9 license extensions for these two plants might mean  
10 for those local economic impacts and state and  
11 local government impacts.

12 So that's a quick overview of what's  
13 spelled out in somewhat more detail in the draft  
14 study plan that's been posted.

15 I think for today, what we generally,  
16 and, Barbara, I'll turn it over to you to carry us  
17 forward here, but I think our general expectation  
18 is that we'd like to hear what people have to say  
19 about the draft study plan. You know, are we  
20 hitting the right topics to address what's in AB-  
21 1632, and what the Commission's been directed to  
22 do.

23 And specific comments on the draft study  
24 plan. We have until December 21st for written  
25 comments. And I think that's the best way to

1 communicate kind of wording changes and line-by-  
2 line suggestions and all of that.

3 But if you can run through the kinds of  
4 changes you think might be useful, we'd appreciate  
5 that today.

6 Barbara.

7 MS. BYRON: Thank you, Steve.

8 VICE CHAIRPERSON BOYD: Well, since the  
9 blue cards are sitting in front of me, -- by the  
10 way, if anyone wants to speak today we ask that  
11 you fill out a blue card -- they're available on  
12 the table at the back -- and get it up here to the  
13 dais so we know to call on you.

14 I have just three at the present time.

15 COMMISSIONER BYRON: Commissioner,  
16 before you move to those, may I ask a question or  
17 two?

18 VICE CHAIRPERSON BOYD: By all means.

19 COMMISSIONER BYRON: Thank you, sir.  
20 Mr. McClary, have you had much involvement with  
21 the Nuclear Regulatory Commission at this point?  
22 Or is it too early in the process?

23 MR. McCLARY: We haven't yet, but we  
24 would anticipate that. Commissioner Boyd has been  
25 the liaison to the NRC. And we hope to build on

1       some of the information that we've gotten from the  
2       NRC as part of the previous nuclear assessments.  
3       And get some of that.

4               We also, obviously a lot of the work  
5       that's been done and the studies that have been  
6       performed are in support of NRC proceedings, or  
7       directly instigated by the NRC. And we'll  
8       certainly be taking all of that into  
9       consideration.

10              COMMISSIONER BYRON: Right. And I  
11       hope -- I mean I'd imagine that they have a great  
12       deal of information. They've got about half of  
13       the domestic plants that have already done their  
14       license renewal applications. And I know a lot of  
15       generic work was done on plant aging.

16              And I would hope that they're very  
17       forthcoming with that information; that you  
18       wouldn't have any problem getting material that  
19       would be helpful to your study.

20              MR. McCLARY: I would also hope that to  
21       be the case. And if we do find problems with  
22       that, we may be looking to the Commission to help  
23       us apply a little leverage there.

24              COMMISSIONER BYRON: Okay. Two things I  
25       just wanted to add. Does it state anywhere in the



1 draft study plan that we are not usurping the  
2 NRC's oversight or their authority in any way with  
3 regard to the operation and the future of these  
4 plants?

5 MS. BYRON: It doesn't state that.

6 MR. McCLARY: Yeah, I don't think we  
7 addressed that explicitly in the study plan. I  
8 think we're anticipating -- we will do what we  
9 can. It may be, and quite honestly in some cases  
10 where states have gone into these areas they've  
11 pushed into areas until told that they are  
12 infringing on federal jurisdiction. In some areas  
13 it's not all that clear.

14 COMMISSIONER BYRON: Okay. The only  
15 reason I bring that up is to perhaps improve our  
16 relationship with them. Because they do have  
17 authority here. And I don't really know legally  
18 to what extent their authority starts and stops.

19 But I just wanted to also emphasize, as  
20 I go through the study plan, the tasks 4, 5 and 6,  
21 with the impacts on California, I think are the  
22 ones that are most significant, and that I'm  
23 certainly most interested in seeing results from.

24 Again, I thank you, and I'll stop there.

25 VICE CHAIRPERSON BOYD: If I might

1 comment on your questions, Commissioner. I'm  
2 fairly expectant that the NRC will be quite  
3 cooperative.

4 COMMISSIONER BYRON: Good.

5 VICE CHAIRPERSON BOYD: Ms. Byron and I  
6 receive literally daily multiple messages from the  
7 NRC. And I talk to them quite often. And while  
8 we haven't talked about what we want from them  
9 yet, they've been quite cooperative in the past.  
10 And I don't anticipate our folks here will have  
11 any difficulty. But should they, we'll certainly  
12 address that.

13 Secondly, with regard to your question  
14 about stepping on their turf, and whose  
15 responsibility. I think it's a good point. And  
16 I'm just reminded of -- and I think maybe we'll  
17 forward a copy of my testimony to the State Senate  
18 Committee on Monday, where we very clearly  
19 outlined the responsibilities of the State of  
20 California and the Energy Commission, and the  
21 responsibilities of the federal government, and  
22 the Nuclear Regulatory Commission, in particular,  
23 with regard to nuclear power plant siting in  
24 California and approval. And some of the safety  
25 stuff.

1                   But, again, it's a good point to be made  
2           that there is a somewhat bright line between what  
3           they're responsible for and what the states,  
4           including California, have responsibility for.  
5           And I think that's something we constantly have to  
6           keep in mind as we do the work on this subject.  
7           So, good points.

8                   Commissioner Geesman.

9                   COMMISSIONER GEESMAN: I wanted to take  
10          some slight exception to one of the things Mr.  
11          McClary said in terms of comments on the workplan.

12                  I certainly agree with him that the most  
13          effective way to convey word-for-word changes to  
14          the proposed study plan is in the written comments  
15          that are to be filed later this month.

16                  But I do understand that PG&E, and  
17          perhaps others, have some specific changes that  
18          they may want to bring to our attention. And  
19          while I don't think that the Commissioners ought  
20          to get into the position of doing staff work, or,  
21          for that matter, consultant work, I'd certainly be  
22          interested in understanding the rationale behind  
23          any of the specific word changes or task  
24          rewritings that PG&E or any of the other parties  
25          would care to share with us today.

1                   And, you know, from the look on the  
2                   clock we've got plenty of time between now and the  
3                   lunch hour to hear them.

4                   VICE CHAIRPERSON BOYD: I think that's a  
5                   good point.

6                   DR. TOOKER: This is Chris Tooker,  
7                   Commission Staff. I just wanted to -- in response  
8                   to Commissioner Byron's question about the NRC, I  
9                   wanted to provide some perspective.

10                  We did meet with Assemblyman Blakeslee  
11                  regarding the bill and its intentions. And, in  
12                  fact, his intentions and interest.

13                  I think it's important to point out that  
14                  he felt one of the fundamental purposes of this  
15                  effort was to provide California with the  
16                  information that it needs to participate  
17                  effectively in the upcoming re-licensing  
18                  proceedings in the future.

19                  So he felt that gathering information  
20                  from the NRC on a very wide range of topics was  
21                  important to inform California to perform  
22                  effectively in that future process.

23                  VICE CHAIRPERSON BOYD: Any other  
24                  comment before we call on the public? I agree  
25                  with Commissioner Geesman; I know Commissioners

1 would like to hear as much as possible, short of a  
2 line-by-line analysis of the report.

3 I know we would like to take in as much  
4 information collectively as we could between now  
5 and the end of this hearing. So we're not in a  
6 rush to finish before noon. We'd like to finish  
7 by noon. Some of us, this Commissioner in  
8 particular, has to leave and get on an airplane  
9 yet to go somewhere else.

10 Okay, with that I'm going to call on the  
11 first of the three cards that were presented to  
12 me. And it happens to be Gary Schoonyan of  
13 Southern California Edison Company.

14 MR. SCHOONYAN: Thank you, Commissioner  
15 Boyd, Commissioner Geesman. Gary Schoonyan of the  
16 Southern California Edison Company. And Edison  
17 appreciates the opportunity to comment on the  
18 draft study report.

19 And as has been discussed briefly by  
20 Steve, San Onofre is an important part of Edison's  
21 generation portfolio, providing cost effective  
22 electricity that is essentially free of greenhouse  
23 gas emissions. SONGS is and has been safe,  
24 reliable baseload generation. And also offers  
25 very valuable grid stability to southern

1 California.

2 In saying that, we look forward to  
3 working collaboratively with the CEC Staff and its  
4 consultants to identify those scientific studies  
5 that will assist the CEC in completing their  
6 assessment.

7 We're also encouraged by the comments  
8 made earlier today by Ms. Byron, as well as Steve,  
9 regarding the use of existing studies, and not the  
10 creation of new studies to help support and  
11 complete their particular assessment. And we  
12 offer whatever assistance is needed to help, not  
13 only trying to secure those studies that are in  
14 existence, particularly from the NRC, but also to  
15 try and help interpret them to the extent that  
16 there are any questions that result from their  
17 review.

18 Furthermore, the NRC, as I've mentioned,  
19 as Commissioner Byron talked about, has  
20 considerable expertise and experience regarding  
21 seismic, plant aging and onsite waste storage  
22 issues that are very applicable to what the draft  
23 study plan is addressing. And we encourage the  
24 CEC's consultant and the staff to rely on the NRC  
25 studies on these various topics.

1           With regard to the issue of existing  
2       studies, we are, at least the review of the draft  
3       study plan, there were a couple of topics that, at  
4       least from our perspective, involve issues where  
5       there are studies that do not presently exist.  
6       Specific studies involved in the time to repair,  
7       replace system structures or components following  
8       a major seismic event or a tsunami; as well as the  
9       cost/benefit analysis as far as license renewal of  
10      the facilities. These studies presently do not  
11      exist.

12           These topics would require new studies  
13      instead of the existing. And we basically  
14      recommend that the draft study plan be amended to  
15      remove these particular areas of work.

16           The draft study plan also refers to  
17      documents of other experts in governmental  
18      agencies, industry and academia. As I had  
19      mentioned earlier, we're eager to assist the staff  
20      and the consultant in identifying and engaging  
21      these other experts.

22           By way of background, also, and I  
23      believe you have in front of you, I have also  
24      provided a letter to Barbara Byron with regards to  
25      a concern we have over certain classification of

1 information. It's called safeguards information.  
2 It's covered by the -- well, it's covered by -- I  
3 forget the name of the Act, the -- Security Act,  
4 or whatever.

5 But it involves the issues of --  
6 actually it's task 5, topic area 4, involving  
7 terrorist risk of onsite waste storage; as well as  
8 task 6, topic 3, which involves the issues of  
9 plant security.

10 And in essence, safeguard information  
11 has a higher degree of protection than just normal  
12 confidential information. And we implore the  
13 Commission to review the letter, review what's  
14 required, and hopefully we'll come to some sort of  
15 meeting of the minds with regards to how that  
16 information or those particular topics areas are  
17 reviewed.

18 Additionally Edison is pleased with the  
19 first two sentences of the draft study which  
20 indicate that it's focused primarily on the two  
21 plants -- solely on the two plants within  
22 California.

23 Now, we do want to take note that part  
24 of the study plan addresses some studies that were  
25 directed to Palo Verde. And we urge the CEC to



1 consider this particular study only as it relates  
2 to the two operating units that exist in  
3 California.

4 Well, I mean, in essence, some of the  
5 issues with regards to the Palo Verde are unique  
6 to Palo Verde. They're not unique to the  
7 facilities in California. Particularly in the  
8 areas of tsunami and those sorts of things.

9 COMMISSIONER GEESMAN: Okay, let's rule  
10 out the tsunami at the Palo Verde plant, but  
11 otherwise wouldn't there be impacts in California  
12 from some of these theorized events at Palo Verde?

13 MR. SCHOONYAN: We're not suggesting  
14 that the study not be reviewed. We're just saying  
15 that basically anything that comes out of that  
16 study should be applied, or basically directed to  
17 issues as they exist on the two operating plants  
18 in California.

19 COMMISSIONER GEESMAN: I'm not clear,  
20 then, on what treatment you think the study plan  
21 should afford Palo Verde. I understood you  
22 initially to say it should ignore Palo Verde  
23 entirely. And now I'm not quite as clear.

24 MR. SCHOONYAN: Okay, well, if I  
25 misspoke with regards to ignoring Palo Verde, as

1 far as the study goes we're not suggesting that  
2 the Commission or its consultants not review that  
3 study.

4 It's just that any conclusions should  
5 only be applicable to the two operating plants in  
6 California.

7 In closing it's Edison's intent to be  
8 involved throughout the process. And we would  
9 like to basically support the staff and the  
10 consultant with regards to providing technical  
11 information, provide technical support on the  
12 interpretation of some of the results of the study  
13 to the extent that questions exist. And, as well  
14 as how to implement the requirements and the  
15 intent of federal law and the treatment of  
16 safeguards information.

17 And with that, I conclude. And we will  
18 be providing, obviously, written comments probably  
19 in a little more detail, but primarily addressing  
20 these particular areas that I've gone through.

21 COMMISSIONER BYRON: Thank you, Gary.  
22 I'm going to join Commissioner Geesman a little  
23 bit in the concern with regard to Palo Verde. I  
24 know that there's, you know, there are certain  
25 things we don't have jurisdiction, as a state, of

1 course, across state lines.

2 But I do worry, and we do worry about  
3 some of the things that we're looking at here  
4 under this study as they might relate to the loss  
5 of energy from that facility, and its impact on  
6 California.

7 So I guess, you know, I see where you're  
8 going; I understand the dialogue with Commissioner  
9 Geesman. I guess, as a Commissioner, I just have  
10 to state I think we, in this Commission, will  
11 worry about what one would do to replace that  
12 source of power for California should there be  
13 some event, let's just say. Certainly not a  
14 tsunami. I'm not sure they're earthquake free  
15 over there. In fact, I don't think anyplace on  
16 this planet is earthquake free, as the years pass.

17 But, in any event, understand what  
18 you're saying. Understand our point of view a  
19 little bit, and our overall responsibility for  
20 worrying about where our electricity comes from at  
21 any given point in time.

22 And quite frankly, although I didn't say  
23 it Monday, I will say here that I do worry about  
24 the yellow and white bars on the ratings that have  
25 been given to the status of Palo Verde. And

1       although at the legislative hearing we didn't talk  
2       about the issue of culture, that's something  
3       else -- safety culture, that's something that does  
4       worry this Commission overall. And, you know, we  
5       continue to pay attention to it.

6               So I just wanted you to have that  
7       message for your company's sake.

8               MR. SCHOONYAN: Thank you. Appreciate  
9       your consideration.

10              COMMISSIONER GEESMAN: Gary, I have one  
11       other area that I was a bit confused by in terms  
12       of your comments.

13              You mentioned areas of the study plan  
14       which touch on subjects for which no previous  
15       studies have been done. I think the ones that you  
16       cited were response time after an earthquake,  
17       response time after a tsunami, and license  
18       extensions.

19              It wasn't clear to me from your comments  
20       as to what you think the workplan ought to do with  
21       respect to those areas.

22              MR. SCHOONYAN: Well, with regards to  
23       those areas, I think, at least from my  
24       perspective, and it was commented on, I -- forget,  
25       just the comment was made earlier -- is in the

1 discussion with Assemblymember Blakeslee, with  
2 regards to one of the efforts or one of the  
3 purposes of this effort, is to develop at least  
4 some issues that would be focused on during re-  
5 licensing and other things going forward.

6 So, to the extent that -- these are  
7 legitimate issues, we're not saying they're not  
8 legitimate issues. What we were conveying is that  
9 presently no studies, at least from our  
10 perspective, exist on them. And it probably  
11 wouldn't behoove this particular effort to try and  
12 create them.

13 COMMISSIONER GEESMAN: Yeah, I think  
14 there are compelling budget reasons for that, if  
15 nothing else. And you have to accept my apologies  
16 here. I don't follow proceedings at the other  
17 Commission that closely, but I have the general  
18 impression PG&E has a number of studies underway  
19 which the Public Utilities Commission has approved  
20 for consideration of license extension.

21 Does Edison have those types of studies  
22 planned?

23 MR. SCHOONYAN: Planned, yes. Present,  
24 no.

25 COMMISSIONER GEESMAN: What kind of

1       timeframe are you on in terms of seeking PUC  
2       approval?

3               MR. SCHOONYAN:  If I recall, and this is  
4       subject to check, but if I recall as part of our  
5       upcoming GRC that we are in the process of filing,  
6       or have just filed, there are some funds earmarked  
7       in that to basically do the type of work necessary  
8       to go forward with the re-licensing.

9               COMMISSIONER GEESMAN:  And what would  
10      you see as the desirable linkage, if any, between  
11      this body of work and those studies that your  
12      company would be completing?

13              MR. SCHOONYAN:  I would anticipate that  
14      the results of this particular effort would  
15      definitely be reflected.  We may not agree with  
16      everything that comes out of this particular  
17      effort, but it will be definitely addressed and  
18      reflected in the efforts that we would put forth  
19      on doing any re-licensing study.

20              COMMISSIONER GEESMAN:  Thanks very much.

21              VICE CHAIRPERSON BOYD:  Thank you, Gary.

22              Next we have Pat Mullen and Scott  
23      Galati, PG&E.

24              MR. MULLEN:  Good morning,  
25      Commissioners, Staff, consultants and the public.

1 My name's Scott Mullen. I'm the Director of  
2 Government Relations for PG&E for our generation  
3 business unit. And we very much appreciate the  
4 opportunity today to participate in this workshop  
5 and be able to engage in some dialogue with  
6 yourselves and the consultants and staff on some  
7 of the aspects of the study plan.

8 What I'd like to do is mention today  
9 first off that our comments will be a few that are  
10 fairly general. But then we also recognize the  
11 focus of today's workshop is on the study plan, so  
12 we did come prepared and have provided you with a  
13 redline version of some specific comments and  
14 edits. And we would be happy to discuss the  
15 rationale behind those.

16 I'd also like to ask Scott Galati, who's  
17 part of our team, to come join us. He's with  
18 Galati and Blek. He's going to help me as we go  
19 through some of the specific items.

20 I also want to mention that we have some  
21 other members of PG&E on our team and my  
22 colleagues in the audience today. We're not  
23 expecting them to give a presentation or have  
24 anything prepared, but we recognize the importance  
25 of this workshop and wanted to bring them and be

1 prepared today in case the Commission or staff had  
2 any specific questions relative to those  
3 disciplines and areas.

4 In the audience we have Jearl  
5 Strickland; he's the Manager of our Used Fuel  
6 Storage program at Diablo Canyon. We also have  
7 Jim Filippi; he's with our Transmission  
8 Reliability Group. And Jennifer Post, who's our  
9 General Counsel for our Nuclear Generation Group.  
10 And Norm Abrahamson with PG&E Geosciences  
11 Department.

12 COMMISSIONER GEESMAN: And for security  
13 reasons you don't let them sit together?

14 (Laughter.)

15 MR. MULLEN: Apparently so, or maybe  
16 they don't get along, I don't know. Yeah, that is  
17 kind of an interesting spread around the room  
18 where we're seated.

19 A couple of the specific or more general  
20 comments I just wanted to mention before we get  
21 into the specifics. I wanted to thank staff and  
22 we also wanted to thank the consultants. We think  
23 they did a very good job in putting together the  
24 study plan and respecting the intent of the  
25 legislation to focus on existing scientific



1 studies. We think it does a very good job in  
2 following that as it goes through.

3 We do have a few areas where we  
4 recommend some changes just to clarify that. In  
5 the areas of the studies we think also that  
6 representative list of studies does a good job in  
7 supporting those tasks. We have some additional  
8 studies that we've identified. And we understand  
9 that that wasn't meant to be an exhaustive list,  
10 but these are some that we've identified that we  
11 thought whether or not staff and the consultants  
12 are already aware of them, and may be good studies  
13 to consider and look at for reference. So we've  
14 brought a list of those today to pass out.

15 And we were going to bring CDs that  
16 actually have copies of those to make it easier  
17 for you. We didn't have those with us this  
18 morning, but we will provide those to staff.

19 In the area of seismic assessments,  
20 Commissioner Byron mentioned the NRC in a number  
21 of his comments. We think that's one agency that  
22 was missing on the list of agencies to be  
23 consulted with respect to seismic. And we think  
24 they may have some expertise in information there  
25 to provide, and would suggest they be included in

1       that list.

2               To the comment Commissioners Geesman and  
3       Boyd asked of Edison regarding what if there are  
4       no studies. We recognize there may be some areas  
5       where studies are not available. We think it's  
6       perfectly appropriate, if that's the case, to note  
7       that. That may be an issue to be considered for  
8       recommendations in the future. But at least with  
9       regard to this effort, if there are no studies  
10      then we also reiterate the importance of not  
11      engaging and trying to surmise or draw conclusions  
12      or come up with new studies. That that could be  
13      noted in reference for followup.

14              COMMISSIONER GEESMAN: Let me ask you  
15      there, I believe I'm correct that the PUC has  
16      given you the approval to go forward with your  
17      studies connected with a possible license  
18      extension.

19              Are you going to be in a position to  
20      identify in some of these areas where no current  
21      studies exist whether or not your company is  
22      addressing that issue in your package of studies?

23              MR. MULLEN: Absolutely. And we'd be  
24      happy to. In fact, you are correct, the Public  
25      Utilities Commission approved approximately \$17

1 million, depending on the formulas you use, but  
2 roughly that amount for us to do license renewal  
3 feasibility study.

4 And part of that study includes a number  
5 of specific items to look at and study. One is,  
6 in fact, a cost/benefit analysis for license  
7 renewal. So that will be part of our effort.

8 Part of that also requires that we  
9 consider the results of AB-1632's effort. So we  
10 will also be taking into consideration the efforts  
11 of this body of work as we move forward with that,  
12 as part of that.

13 So, thank you for that clarification.

14 And then lastly, just a comment on the  
15 nuclear safeguards issue that Edison brought up.  
16 Clearly we concur if there are issues that are  
17 relative to nuclear security, to the confidential  
18 nature of Homeland Security and nuclear safeguards  
19 that clearly that material information needs to  
20 continue to be protected and safeguarded. And we  
21 would recommend that that's the way you look to  
22 the NRC on addressing those areas. And what  
23 information is available. We assumed available  
24 meant generally publicly available, or readily  
25 available.

1           With that, you should have a copy of our  
2   kind of redlined version. And I'd like to  
3   introduce, again, and turn it over to Scott Galati  
4   to help go through a clarify some of those  
5   specific comments. Thank you.

6           MR. GALATI: Good morning. Scott Galati  
7   representing PG&E. And, again, not to drag the  
8   Commissioners through a line-by-line, so if I  
9   could just go through a couple of them. As you'll  
10  see, many of the changes that we proposed in those  
11  tasks are intended to change and substitute words  
12  like review and assess, or review and compile, as  
13  opposed to maybe giving the impression that new  
14  studies were done.

15           So those are clarifying words; I'm glad  
16  to hear that MRW, that's what they intend to do.  
17  And certainly these comments are not intended to  
18  prevent the report from synthesizing that work and  
19  providing meaning to it.

20           So some of those changes are redundant,  
21  and I apologize. So I won't go through them all.

22           There is one very important one, though,  
23  that I wanted to point your attention to. And  
24  that is, for example, how would you treat a  
25  particular area that has had extensive number of

1 studies. Those studies were then compared and  
2 almost litigated or adjudicated to come with an  
3 outcome. And I direct you to the seismic portion,  
4 and specifically sub-task 4, which deals with the  
5 Hosgri Fault and deals with strike-slip versus  
6 thrust.

7 And in this case what we think should be  
8 done is that you should start with the NRC and  
9 what they have adjudicated. And then look to  
10 anything new on top of that. As opposed to  
11 reopening an area that was adjudicated, had expert  
12 witnesses, lots of study. There's a lot of  
13 information out there. Some of the studies may  
14 have been rejected, some of the studies may have  
15 not been given as much weight as another study.

16 So, again, we ask the consultant to  
17 start with that conclusion, look what has changed  
18 or updated, and build upon it, as opposed to  
19 reopening. That is the purpose of that. Not that  
20 it's not an important issue, just there's, in our  
21 opinion, no reason to start over.

22 Again, we have a list of additional  
23 studies there for you that I handed out.

24 One of the next change I want to talk  
25 about, and again, skipping around to the aging

1 vulnerability assessment, again, is subtopic 5.

2 And this deals with how do you assess the  
3 implication of replacing retiring workers on plant  
4 performance, safety and reliability.

5 We asked you to specifically incorporate  
6 a lot of the work that has been done, or changes  
7 in this area are intended for you to incorporate  
8 that, as opposed to, once again, trying to  
9 complete a new study. So we hope that those  
10 clarifying changes might be made.

11 Wanted to point you to a sentence that  
12 we asked to be deleted from the production cost  
13 modeling approach. And that's on, I think, page  
14 12 of your handout. And at the very end of the  
15 sentence in the reduction cost modeling approach,  
16 the sentence says: In addition, the contractor  
17 will be cognizant of issues raised by the Ocean  
18 Protection Council in their assessment of the  
19 possible retirement of plants that use once-  
20 through cooling."

21 We think that that draws a conclusion  
22 that's not yet been made. We think that you can  
23 do your production cost modeling based on whether  
24 the projects are going to continue to go forward,  
25 whether re-licensing will be granted. So we were

1 a little confused about what was intended.

2 VICE CHAIRPERSON BOYD: Why don't we ask  
3 our staff to comment on that before perhaps  
4 Commissioners comment on it. Steve or Barbara.

5 MR. McCLARY: Yeah, actually as I said  
6 before, you know, what we're trying to do here is  
7 not reinvent studies that have been done. And  
8 this was actually a specific example of some  
9 modeling work that's been done. And, in fact, is  
10 looking directly at the issue of what to do if you  
11 replace some of these major baseload plants.

12 And it's actually one that we discussed  
13 quite specifically because it was one of the most  
14 recent examples of that being done specific for  
15 California. And I would be reluctant actually to  
16 say that we wouldn't look at something like that.  
17 I'd be afraid it would lead us in the direction of  
18 re-doing work that's already been done. And, in  
19 fact, much of it by the same member of our team  
20 production cost modeling that's been done looking  
21 at exactly this issue in the context of once-  
22 through cooling.

23 So really the intent here is not to  
24 answer a question with the same answer that has  
25 been reached in a different regulatory context,

1 but to build on the modeling work that's being  
2 done in that different proceeding without our  
3 having to duplicate it in some fashion.

4 MR. GALATI: It might be that when you  
5 read the sentence it certainly seems that maybe  
6 you assumed the plant is retired due to once-  
7 through cooling issues, and so what will you do.  
8 So maybe I'm confused as to what issues are  
9 presented in that modeling.

10 If I understand it correctly, you're  
11 going to be looking at similar issues presented in  
12 that modeling, not making an assumption that once-  
13 through cooling is banned, and therefore plants  
14 won't be operating.

15 MR. McCLARY: Yeah, we can clarify that,  
16 because, no, we won't assume that a particular  
17 outcome is --

18 MR. GALATI: Okay.

19 MR. McCLARY: -- only from that  
20 proceeding.

21 MR. MULLEN: And I'd just like to add, I  
22 think that was part of the confusion. The Ocean  
23 Protection Council study was really focused on  
24 feasibility for retrofits. And we weren't sure if  
25 you were inferring retirement versus the



1 feasibility. So I think that kind of  
2 clarification might help.

3 MR. McCLARY: Okay, that's fine; thank  
4 you.

5 COMMISSIONER GEESMAN: You guys are  
6 talking about the TetraTech study that was done  
7 for the -- or is being completed for the Ocean  
8 Protection --

9 MR. McCLARY: There's TetraTech work;  
10 there's also, I believe, Global Energy work being  
11 done to support the resource modeling on that.

12 COMMISSIONER GEESMAN: And when you talk  
13 about retirement of plants, you were talking about  
14 the fossil-fired plants, as well, were you not?

15 MR. McCLARY: In that proceeding they're  
16 looking at both fossil and nuclear.

17 COMMISSIONER GEESMAN: Okay.

18 MR. McCLARY: But to the extent that the  
19 work that's being done there is useful for this,  
20 we just didn't want to duplicate that work.

21 MR. GALATI: Yeah, and we understand and  
22 support no duplication of work. Maybe just some  
23 clarification on that so it is -- came as a bit of  
24 a surprise, and it's probably because I read it  
25 wrong.

1                   VICE CHAIRPERSON BOYD: Well, I now  
2 understand your sensitivity. Initial thought was  
3 that we can't ignore the work of the Ocean  
4 Protection Council, since we contribute to the  
5 work and participate in it. Now I understand your  
6 sensitivity to a few words in the sentence. So,  
7 as indicated, I'm sure clarification can be  
8 derived.

9                   MR. GALATI: Thank you. One of the  
10 points on the next topic, which is the scope of  
11 nuclear waste accumulation assessment, again just  
12 some clarifications on what has been done, and  
13 specifically on estimating the payments of  
14 California ratepayers in task 3, in that last  
15 bullet. We wanted you to incorporate what the  
16 Commission has already done in the 2005 and 2007.  
17 There's quite a body of work there.

18                   So I didn't think you would be re-  
19 investigating or estimating that what you would be  
20 doing is building, actually referring to what  
21 you've already done.

22                   MR. McCLARY: I think perhaps updating  
23 estimates and reviewing any additional information  
24 is maybe a better way to put that. And I think we  
25 can clarify that.

1 VICE CHAIRPERSON BOYD: Okay.

2 MR. GALATI: And I think that the rest  
3 of our comments are pretty self explanatory and  
4 fall into that general set of comments.

5 So, again, I think staff and MRW have  
6 done a great job of staying true to the intent of  
7 the legislation, and we look forward to continue  
8 to work.

9 We would urge you that during your work,  
10 rather than when a draft report comes out, it  
11 makes it very difficult sometimes to engage in a  
12 dialogue about what something is already written.  
13 If there are issues that come up that need further  
14 discussion we encourage more workshops before a  
15 draft report is prepared. We think that's more of  
16 a roll-up-your-sleeves, have a dialogue. And then  
17 we can solve things before they're put down in  
18 writing.

19 VICE CHAIRPERSON BOYD: I think we agree  
20 with that when it comes to the production of draft  
21 reports. And I think that's the practice here at  
22 this agency. So, I believe that will be  
23 accommodated.

24 One comment I will make, not with  
25 specific reference to any of your comments, but

1       just an overall theme. And that has to do with,  
2       you know, don't do new work; certainly don't  
3       reinvent the wheel. But a little bit of don't do  
4       new work because there's a huge body of existing  
5       work.

6               And I must admit as Senator Geesman --  
7       as Commissioner Geesman indicated, were you  
8       thinking about this and I just picked -- I mean,  
9       you know, he's not a Commissioner much longer.

10              The comment he made about budgetary  
11       restrictions is something we all live with, of  
12       course. And you can't go do incredible amounts of  
13       new work. But I guess I just kind of live always  
14       thinking of the fact that did we not turn over new  
15       rocks, did we not do new work every now and then  
16       what a stagnant world it would be. I guess those  
17       guys in Apollo 13 would still be out there  
18       somewhere if a lot of new work weren't suddenly  
19       done.

20              So, to the extent we can, certainly  
21       occasionally new rocks get turned over and a  
22       little new work gets done within the ability of  
23       people to do it budgetarily and timewise. So I  
24       don't like to leave the impression that never ever  
25       is new work needed because there's such a huge

1 body of work's been produced in the past relative  
2 to the subject, there's no need to think about new  
3 work.

4 I think we will always think about new  
5 work, if it fits, if it can be done. Or if one of  
6 the results of this effort is to say in response  
7 to legislative inquiry that some new work needs to  
8 be done in an area based on all the work that  
9 we've all collected, we've done in examining this  
10 issue.

11 And one thing that comes to my mind  
12 that's uppermost in everybody's mind in this state  
13 these days, is the issue of climate change, and  
14 the issue that it has brought to the table of the  
15 need for everything from identifying the full  
16 carbon footprint of things to the full  
17 environmental footprint, to the full cost  
18 footprint.

19 Which really gets to the idea of call it  
20 what you want, cradle-to-grave analyses, new looks  
21 at things. A lot of that's going to get done in  
22 our society in this day and age as people debate  
23 what do we do next to address that problem, and  
24 yet move forward.

25 Not that we're going to do those studies

1 here, but it's all part of the fact that we do  
2 always need to turn a corner and do additional and  
3 new work.

4 And a lot of the issues we're talking  
5 about here, cost effectiveness, cost/benefit, et  
6 cetera, will certainly get a fresh look in the  
7 not-to-distant future, as people here and other  
8 places debate, you know, the full cost footprint  
9 of some of these issues.

10 And I think we talked about it a little  
11 bit on Monday in the legislative hearing about the  
12 need to how to assess, you know, what's really the  
13 cheapest form of power, and the cost effectiveness  
14 of things.

15 So, anyway, just a little lecture from  
16 this old curmudgeon on the subject to the need to  
17 look for --

18 MR. GALATI: Commissioner Boyd, we  
19 certainly understand that, and we agree with that.  
20 And I think that our comments reflect that, as  
21 well. Most of the time we're asking you to go to  
22 additional studies.

23 For example, we understand that this  
24 work does require some amount of economic  
25 modeling. We didn't say don't do that. There is

1       some analysis that needs to be done.

2               But in the area of seismic, in the area  
3       of vulnerability, in the area of plant aging, in  
4       the area of waste accumulation there is such a  
5       large body of work we think that we should start  
6       there.

7               If there was new work that needed to be  
8       done, clearly that work should be vetted the same  
9       way such that, you know, any study that's prepared  
10      is one that the experts can comment on.

11              So, we're not afraid of new work. We  
12      just want to make sure that it's accurate and is  
13      given the amount of attention that's needed.

14              VICE CHAIRPERSON BOYD: Well, I think w  
15      all share that goal. Thank you.

16              MR. GALATI: Thank you.

17              COMMISSIONER GEESMAN: Thanks, Scott.

18              MR. MULLEN: I just wanted to make a  
19      couple of brief closing comments. And in response  
20      to that, amplify what Scott said.

21              Part of what we tried to do in  
22      suggesting some of the additional studies that we  
23      looked at were identify some of the new work and  
24      new studies that staff may or may not be aware of.  
25      So there is a lot of new work that's going on in

1 new studies.

2 And if we can help be a resource with  
3 some of the expertise we have in our shop, so to  
4 speak, by identifying or pointing to some of that  
5 new work, we tried to do that, as well.

6 I also wanted to mention, on the  
7 comments about the new work on lifecycle  
8 footprints and greenhouse gas impacts, as well as  
9 other real issues, we recognize there are real  
10 concerns and real issues related to nuclear power.

11 But clearly, we're also very proud of  
12 Diablo Canyon and nuclear power and what it's  
13 provided for PG&E's service territory and for  
14 California. We think it's an incredibly important  
15 asset. Part of the reason in California that we  
16 have a 90 percent greenhouse gas-free generation  
17 in our portfolio in PG&E is related to Diablo  
18 Canyon. Also hydroelectric is a big part of our  
19 own inhouse generation.

20 But in California, it does play a role.  
21 So, we appreciate the comments that you made on  
22 that. And obviously there's a weighing of all of  
23 the impacts with any fuel source and any type of  
24 generation.

25 So, we look forward to working with the



1 staff and with the consultants. If there's any  
2 additional information or expertise we could  
3 provide, we certainly want to make that available.  
4 And we look forward to responding to those types  
5 of requests.

6 And, again, we appreciate the workshop  
7 today, the opportunity to provide input, and look  
8 forward to working together in the future. Thank  
9 you.

10 VICE CHAIRPERSON BOYD: I thank you for  
11 your offer of cooperation. I thank yo for this  
12 list you've given us as additional studies. It's  
13 going to be very helpful, I'm sure.

14 MR. MULLEN: Thank you.

15 VICE CHAIRPERSON BOYD: And bodes well  
16 for a cooperative relationship. Thank you very  
17 much.

18 The next, and at the moment last,  
19 request to speak that I have a blue card is from  
20 Rochelle Becker, Executive Director of the  
21 Alliance for Nuclear Responsibility.

22 MS. BECKER: Good morning,  
23 Commissioners. I'm glad to be here today, and I  
24 thank you for having this proceeding. And I want  
25 Commissioner Geesman to know he will be sorely

1 missed.

2 I have some mostly just questions that  
3 go along with this. And then also I'd like a  
4 request to Pat if I can get a copy of your redline  
5 paper that you handed out? Thanks.

6 On the seismic issue I was wondering if  
7 you're going to look at the impacts of more than  
8 one quake at a nuclear plant. Quite often you'll  
9 have a quake that is below the design basis, or  
10 even at the design basis that didn't cause any  
11 damage, and that's what we all hope because we  
12 live there.

13 But it can stress what is there. There  
14 are miles of pipes and thousands of wells, and I'm  
15 probably understating that, that could be stressed  
16 during an earthquake, and then a second earthquake  
17 hit, the stress could come out at that time.

18 So, I'd like you to make sure that we  
19 consider -- I mean we live in California, and more  
20 than one earthquake has happened in the same place  
21 in my lifetime, several times, actually. And an  
22 example is my parents' house in the San Fernando  
23 Valley; and the first earthquake it was fine and  
24 the second one we got to rebuild it because it was  
25 stressed so much from the first time. So, that

1 does happen.

2 Two, will you consider the fact that  
3 recently replaced components, steam generators,  
4 turbine rotors, reactor vessel heads and so on may  
5 need to be replaced again. My assumption is that  
6 they were designed for the full life of the plant  
7 when they first went into our ratebase. And we  
8 weren't supposed to have to replace them again.  
9 Twenty years into operation, we've had to replace  
10 them.

11 If you give them another 20 years beyond  
12 their 40-year current license, will they need to  
13 be replaced again. And what will the costs be.  
14 And where will you find someone to make them  
15 seeing as the steam generators at Diablo are  
16 coming, I think, from Spain and from -- San Onofre  
17 are coming from Japan.

18 Three. Oh, no, I don't have to do  
19 three. Four. Are you also considering as part of  
20 baseload a combined facility, especially at Diablo  
21 Canyon. I get to see these really cute  
22 commercials of this little boy running around  
23 saying, wind, sun, water, renewable energy, the  
24 wave of the future. And I love those commercials;  
25 I think they're great.

1                   And we have a lot of coastline in  
2           California that's energy zoned. So I would love  
3           to see a state-of-the-art wind, sun, water  
4           facility instead of a huge, what you want to call  
5           baseload facility put at Diablo Canyon.

6                   So I was hoping that you might consider  
7           something really cool that, you know, people would  
8           want to come and see in California if you could  
9           get around the security issue in getting around a  
10          nuclear power plant that's going to still be  
11          there.

12                  Also coastal erosion. It's not just a  
13          seismic issue in California, but climate change is  
14          supposed to be causing coastal erosion, or is said  
15          to cause coastal erosion and heating of water. We  
16          have a mixed blessing of having an ocean to cool  
17          our nuclear power plants, so we have a lot of  
18          water.

19                  The rivers and lakes for other nuclear  
20          power plants are more susceptible to rising of  
21          temperatures. But coastal erosion is also another  
22          issue that we may need to look at as the coast  
23          erodes in California, and how much it's eroded in  
24          the last -- since we've actually kept track of  
25          erosion, I guess. How much has it eroded, and

1 with this new concern about global warming, will  
2 there be further erosion of our coastline as both  
3 of our nuclear power plants sit on our coastline,  
4 San Onofre a little closer than Diablo Canyon.

5 Also I don't like to call them -- so  
6 it's the high-level, radioactive waste storage  
7 facility at the site. My understanding is that if  
8 these nuclear power plants get license extensions  
9 we're going to have to build another pad to store  
10 the radioactive waste there, assuming that there  
11 is no permanent waste site, which I think is an  
12 assumption we're all just getting ready to live  
13 with, because it doesn't seem to be there.

14 So, what the impacts are in having to  
15 build another pad and putting more dry cast  
16 storage on those sites. Existing studies, will  
17 those include studies that have been released in  
18 the next year? Does existing mean as of beginning  
19 of your study? There are studies that are in  
20 process that are coming out of Japan from their  
21 earthquake. And not only the impacts of the  
22 earthquake on the plants, but the impact of 6000  
23 megawatts being offline, and what that replacement  
24 power costs.

25 I mean I know you have to change yen to

1       dollars, but I think you can figure that out. And  
2       our dollar isn't worth much so you have to do that  
3       math. I think we should look at those numbers.  
4       And they are available and are becoming available.

5               Process. I hope that the public is  
6       including absolutely everything in this process.  
7       Quite often we are left out, and I so appreciate  
8       workshops like this that we can all be in the same  
9       room at the same time saying the same thing to  
10      everybody.

11             And they don't come in and talk --  
12      excuse me, the utilities don't come in and talk to  
13      you and say whatever they want to say; and then we  
14      come in and say whatever we want to say. We never  
15      hear what each other's saying. I think it's  
16      really valuable for us to hear it, even if we  
17      don't agree.

18             Edison and PG&E are trying to run  
19      facilities as safely as possible. Their families  
20      live there, too. This isn't about not safely  
21      running facilities. It's about what the impacts  
22      are to California. And including the public in  
23      the process is very very important. And in a  
24      democracy it's what a democracy is. Although it's  
25      also being eroded.

1           Also in your IEPR you use your  
2       Commission Staff to develop your IEPR. And I'm  
3       wondering how much of your Commission Staff you're  
4       using for areas such as review of literature, land  
5       use, property values, resources. You know, I know  
6       you don't want to spread your staff too thin, but  
7       I think you have some valuable resources right  
8       here within the Commission that also should be  
9       included in working on this study. And I'd like  
10      to see that happen.

11           There are other reactors that are going  
12      through re-licensing process besides Pacific Gas  
13      and Electric Company. In the back of the page you  
14      state the Massachusetts case. But also Indian  
15      Point is going through re-licensing. And there's  
16      a lot of similarities. In fact, there's  
17      similarities of issues that have been brought up  
18      in California that they're using in their re-  
19      licensing proceedings in New York. So I think  
20      that there are some relevant studies that we  
21      should be looking at as they arise.

22           You've answered the study, the once-  
23      through cooling, --

24           (Pause.)

25           MS. BECKER: Oh, on the seismic issue

1       when PG&E referred to looking at the NRC studies,  
2       and that they've done some excellent studies at  
3       Diablo Canyon, which is true, but I'd like to, I  
4       guess, advise this Commission that during the  
5       licensing proceedings for dry cast storage, the  
6       issue of seismicity as a contention was denied.

7               I may not be remembering this completely  
8       accurately, so you might want to look at the  
9       transcript, or I will find it for you. But, the  
10      decision was that they didn't turn down re-looking  
11      at the seismic issues at Diablo Canyon due to the  
12      merits of our contention. What they said was this  
13      is all the same facility. So if you want to talk  
14      about new seismic criteria, or new seismic  
15      problems, or retrofits or whatever for the seismic  
16      issue, you have to go and file to reopen the whole  
17      licensing proceeding for the reactor site.

18             And at the time I was the spokesperson  
19      for the Mothers for Peace, and we had to raise  
20      \$100,000 to take them to court on the security  
21      issue, and didn't have any money to take them to  
22      court to do the seismic issue or go through that  
23      again.

24             So, when you're thinking of seismic  
25      issues and the NRC, I'd like you to know that that



1 contention was never litigated, and I think it  
2 would have been very valuable information for this  
3 Commission to have.

4 And with that, I end. So, thank you  
5 very much for your time and for your patience.

6 VICE CHAIRPERSON BOYD: Thank you.  
7 Thank you, Rochelle. Barbara or Steve, any  
8 comments you want to make?

9 MS. BYRON: Is Steve Fielder --

10 MR. FIELDER: Yes. I'm sorry, I didn't  
11 hand the --

12 VICE CHAIRPERSON BOYD: Well, just --

13 MS. BECKER: -- blue card in.

14 VICE CHAIRPERSON BOYD: -- a minute.  
15 I'm not sure we're done with Rochelle just yet.  
16 Let me ask my question. Any comments that any of  
17 you might have with regard to issues that Rochelle  
18 just brought up? Or any assurances you might want  
19 to give her about breadth and depth of the work  
20 you intend to do, or whether we're going to turn  
21 more staff resources to this subject.

22 I may have scared her into thinking  
23 Barbara's all we got and Steve. But as you see at  
24 the table, we're at the table, there are several  
25 more people on the staff and several other

1 retained staff that are working this subject.

2 MR. McCLARY: And I can respond to some.  
3 And certainly, Rochelle, any written comments that  
4 we can reflect in the study plan would be helpful,  
5 as well.

6 But just a few thoughts on those --

7 MS. BECKER: Just so you don't have to  
8 look at my back, or I don't have to look at yours.

9 MR. McCLARY: On the multiple seismic  
10 events, David Johnson's at the other end of this  
11 table, so he can't kick me in the shin for saying  
12 it, but I think, you know, to the extent that that  
13 issue, you know, stress on the components and  
14 response in seismic situations is there to look  
15 at, and the information's available.

16 Yeah, I mean, we would be looking at  
17 that kind of issue, as well. And, you know,  
18 certainly not intending to exclude anything like  
19 that.

20 Replacement, again, of major components  
21 if there's a license renewal. I think that will  
22 certainly be an issue in any kind of assessment of  
23 cost/benefit of license renewal. Whether we're  
24 able to do the detailed cost/benefit in this  
25 proceeding, or whether we're looking to the work

1       that's being done elsewhere, is something that has  
2       already been brought up here. But certainly that  
3       would be a factor, I would think, in any  
4       consideration as to what the anticipated lifetime  
5       of any equipment, and particularly of what those  
6       major cost components would be.

7               The replacement for a baseload facility,  
8       although -- and I'm probably as guilty as anyone,  
9       you know, you can refer to that in a shorthand way  
10      and make it sound like it would have to be another  
11      baseload facility. That is not necessarily the  
12      case.

13             And I think typically the work the  
14      Commission supports in modeling resources in the  
15      state looks to a mix of resources as, you know, if  
16      that's the cost effective or the best way to  
17      replace or to provide the equivalent of baseload,  
18      that would be the way you'd go. So, replacement  
19      for baseload is not necessarily another baseload  
20      plant.

21             Coastal erosion. That is an interesting  
22      one. I don't think we have that identified  
23      specifically anywhere in the study plan. I'm not  
24      sure what there is to go on, but I thank you for  
25      identifying the --

1 MS. BECKER: I did talk to the Coastal  
2 Commission about it, and they said they do have  
3 information. But nobody's coalesced it. And  
4 nobody has a budget to coalesce it. So, it was  
5 like, -- I don't either.

6 MR. McCLARY: Well, yeah, --

7 MS. BECKER: But I'd like to see it  
8 done.

9 MR. McCLARY: There are budget  
10 constraints on a lot of --

11 MS. BECKER: Yeah, I know.

12 MR. McCLARY: -- these issues. But I  
13 thank you for the identification.

14 Waste storage at the site, another pad.  
15 this is part of the cost/benefit analysis of  
16 facilities going forward and may well be, I mean  
17 you're right, if the plants operate for a total of  
18 say 60 years, and the federal government never  
19 gives them a place to put it, they'll have to do  
20 something. And depending on the site they might  
21 have to build another pad for additional storage.

22 I don't know if that's the case or not,  
23 and I don't know whether they've considered it or  
24 not yet.

25 MS. BECKER: I did ask that question of

1 PG&E and they did say yes. So, --

2 MR. McCLARY: Well, --

3 MS. BECKER: But I'm not sure that  
4 person works -- in fact, I know that person  
5 doesn't work any longer. So, you'd have to ask  
6 somebody else, I guess.

7 MR. McCLARY: It's on our list.

8 MS. BECKER: Thank you.

9 MR. McCLARY: Existing studies and what  
10 comes up over the next year. You know, without  
11 sounding like I'm just caveating on it, I think  
12 our intent would be to take into account all the  
13 existing work that we're able to take into  
14 account.

15 So as stuff comes up in the course of  
16 the analysis, yeah, we want to reflect it. If  
17 something is in draft form and is embedded, or the  
18 parties who are doing it aren't comfortable with  
19 its use, or it comes out, you know, you get a  
20 final study the day before the AB-1632 assessment  
21 is released, well, no, I don't think we probably  
22 will be able to take that into account.

23 But we're not putting a bright line on  
24 today and saying if something comes out after  
25 today we won't consider it. That's certainly not

1 the case.

2 Process and open workshops. I think  
3 that's, you know, for the Commission to address.  
4 You know, I think they are known for doing things  
5 in an open fashion. We certainly look to them to  
6 set that.

7 Similarly on CEC Staff resources. We  
8 want to make as much use of those staff resources  
9 as they are able to make available to us. And  
10 they can better address the constraints in which  
11 they're operating. But I know there are real  
12 constraints on what the staff here is able to do,  
13 and how much they can contribute.

14 Other re-licensing cases. Yes, I mean  
15 anything available out there on re-licensing.  
16 That was a representative sample.

17 And then on seismic issues, this is one  
18 of the -- the whole issue of seismic vulnerability  
19 and risk assessment and the studies that have been  
20 done, as has been raised by PG&E, as well, there's  
21 an enormous body of work for us to get our arms  
22 around on this.

23 And the seismic analysis that may or may  
24 not have been performed as part of the work  
25 application and all, I doubt that we're going to

1 be able to do the work that wasn't done in that  
2 case. But we'll certainly be building on what's  
3 out there, what's been done and what is known.  
4 We're not intending to only rely on older  
5 decisions and leave it at that.

6 MS. BECKER: Would it be possible to  
7 submit the testimony that was part of that  
8 contingent, so you could just look at the issues  
9 that we had brought forth? I mean it hasn't been  
10 vetted; there have been no hearings. But it is  
11 information that would have been, if we could have  
12 raised the money, would have been litigated. So.

13 MR. McCLARY: I know of no reason, you  
14 know, why we would preclude anything being entered  
15 into the record here.

16 VICE CHAIRPERSON BOYD: We'd welcome it.

17 MS. BECKER: That's all.

18 VICE CHAIRPERSON BOYD: Thank you very  
19 much.

20 MS. BECKER: Thanks.

21 MS. BYRON: If I could add a little bit  
22 to what Steve was saying, anything related to  
23 seismic vulnerability, we're planning to rely  
24 pretty heavily upon our experts that we've  
25 assembled, our science vulnerability assessment

1 team, as well as the contractors seismic experts.

2 So, your recommendation on using more  
3 than -- the impacts of more than one earthquake  
4 and the potential impacts on a facility, we would  
5 definitely turn that issue, or put that issue  
6 before our advisory team.

7 Regarding the public process, as  
8 Commissioner Boyd mentioned, that's something that  
9 we always strive to do. And to the extent that we  
10 have a very tight timeline, we have to produce a  
11 report next November, but to the extent we can we  
12 certainly plan to schedule as many public  
13 workshops, working group workshops, as we can.

14 And as Steve mentioned, the existing  
15 studies, the Japanese earthquake study if it's  
16 something that is available during the timeframe  
17 when we're developing that portion of the study,  
18 definitely we would include that.

19 And, Chris, or Karen, did you have  
20 anything that you wanted to speak to regarding  
21 staff resources for some of the other areas?

22 DR. TOOKER: Yes. This is Chris Tooker  
23 from the Commission Staff. At the time this bill  
24 came forward we requested contract support because  
25 we don't have either the staff resources to commit



1 to it in the timeframe that's required, nor do we  
2 have, in all areas, the expertise needed.

3 And we recognized the need for both  
4 contract support, as well as the advisory  
5 committee in key areas. So although we do provide  
6 some review and oversight in our function, we  
7 really feel that going with contract support was  
8 the appropriate way to do it in a timely fashion.

9 MS. BECKER: Thank you.

10 VICE CHAIRPERSON BOYD: Thank you. Now  
11 the last gentleman who will have to read his own  
12 blue card into the record, since it didn't make  
13 its way up here.

14 MR. FIELDER: Good morning. My name is  
15 Scott Fielder. I'm an attorney in Nevada City,  
16 California. For many years I lived in Humboldt  
17 County and came to have lots of experience with  
18 the Humboldt Bay Nuclear Power Plant. And have  
19 litigated a number of trials regarding  
20 decommissioning over the last 20 or so years.

21 My initial comment today is to start  
22 with the request for proposal and whether or not  
23 the contractor has addressed issues raised in the  
24 RFP in their plan.

25 Task 5.1 and 5.2, the Commission

1 detailed the contractors to perform, stated that  
2 to quantify and describe, this is task 5.1 --  
3 quantify and describe the amounts of radioactive  
4 waste generated at each plant over the plant's  
5 operating and license period, including -- and I  
6 underscore -- decommissioning waste.

7 It goes on to say, and spent fuel, of  
8 course. And describes the characteristic of these  
9 types of waste.

10 5.2, that's task 5.2, asks the  
11 contractor to assess lands and cost of waste  
12 storage, repackaging, transportation and disposal  
13 of low-level radioactive wastes, spent nuclear  
14 fuel and decommissioning wastes.

15 I have reviewed the 17-page draft plan  
16 and the word decommissioning does not appear  
17 anywhere in the document. It seems to me that the  
18 contractor has focused all of its attention on  
19 fuel, faults, tsunamis and the impact of outage.

20 Now, as was pointed out earlier,  
21 Blakeslee, part of the intent of Blakeslee's AB-  
22 1632 bill was to examine and assess re-licensing  
23 and the impacts or the costs that might influence  
24 re-licensing.

25 One of those cost/benefit issues is the

1 ever-increasing costs of decommissioning our  
2 nuclear power plants which keep exploding upward  
3 in their costs to decommission them.

4 And there's many factors that continue  
5 to be simply beyond the control, other than to  
6 just analyze them year-by-year, with those costs,  
7 for instance, for low-level radioactive waste, the  
8 disposal escalated anywhere from 10 to 20 percent  
9 over the last historical 20 years. These costs  
10 have to be taken into account on re-licensing.

11 So, I'd ask that those tasks be -- the  
12 contractor be redirected to address those tasks on  
13 decommissioning.

14 Second, my second recommendation -- and  
15 by the way, this morning I got the notice of this  
16 hearing on Friday. It was not sent to me. I had  
17 to learn of it indirectly. And I prepared written  
18 comments. It's five pages long. And filed the  
19 original and ten copies this morning. I have some  
20 extras here, and I put some extras outside. So my  
21 comments are contained also in writing into a  
22 little bit more detail.

23 A couple of comments, recommendations  
24 that are not contained therein are these: The  
25 contractor, I believe, is doing a very very good

1        job, but they may need some help, additional help  
2        from the staff in carrying out their tasks.

3                It's my understanding that the  
4        environmental office of the Energy Commission here  
5        has resources available; thought that they were  
6        going to participate and is willing to do so. And  
7        I would strongly recommend that they be allowed to  
8        help with carrying out this particular work of the  
9        analysis, in particular.

10              Third. On the issue of how the  
11        procedure of the contractor's work is going to be  
12        carried out. Are we, in fact, limited to only  
13        reviewing scientific studies. It was my  
14        impression, listening to the presentation, that we  
15        were limited to scientific study review in this  
16        process.

17              And having reviewed Public Resources  
18        Code 15303, it does anticipate that that be done  
19        for section A. But when you go to section C of  
20        that code, that's the A-1632 law, it does not  
21        limit the analysis to scientific study.

22              Now perhaps time limitations will  
23        accomplish that limitation, but I would urge the  
24        Commission to not narrowly define what is to be  
25        examined.

1           If we only look at scientific studies,  
2       it might rule out reviewing such things as the  
3       2004 General Accounting Office review of the cost  
4       of low-level radioactive waste. It's more of a --  
5       it's not a scientific study, it's more of a  
6       general review of the subject to see where we've  
7       been and where we're headed.

8           And they concluded that we've been at \$1  
9       a cubic foot for disposal then; and now we're, in  
10      2004, we were at \$400 a cubic foot. And so those  
11      things that are not scientific studies, I'm hoping  
12      the Commission wants it to be a little bit broader  
13      than just scientific studies usually carried out  
14      by the industry. About 80 percent of those  
15      studies would be industry-based. And might, from  
16      my point of view, skew the outcome of the  
17      decisions.

18          Now, back to my main concern, because I  
19      am a decommissioning person interested mostly  
20      historically in decommissioning, of interest to me  
21      is the fact that we are about to lose the ability  
22      to bury low-level, radioactive waste. I should  
23      say dispose, it's not always buried.

24          We're going to lose the ability here in  
25      California to dispose of B, C and greater than C

1 waste in just a few months, July of 2008. The  
2 Barnwell (phonetic) facility is closing and it's  
3 not going to take our waste anymore.

4 There's nowhere to put it yet. Maybe  
5 there will be in the future. But right now it  
6 looks like there isn't going to be. And that may  
7 trigger us back to having to develop and spend the  
8 money to build a Ward Valley type southwest  
9 contract facility, which, again, these things all  
10 factor into how the cost of re-licensing needs to  
11 take these issues into account.

12 And they aren't scientific studies.  
13 These are just facts. They exist in the various  
14 proceedings at the PUC and a few other places. So  
15 I would ask that the Commission consider making  
16 sure that we broaden the issue of re-licensing and  
17 to include all of decommissioning.

18 And those are my comments for today. If  
19 you have any questions I'd be happy to answer  
20 them. Thank you very much.

21 VICE CHAIRPERSON BOYD: Thank you.  
22 Thank you for your participation. Appreciate the  
23 fact you have given us the written comments, as  
24 well.

25 MR. FIELDER: Thank you.

1                   VICE CHAIRPERSON BOYD: Any questions or  
2                   comments from any of the staff?

3                   Thank you very much.

4                   MR. FIELDER: Thank you; it was nice to  
5                   meet you.

6                   VICE CHAIRPERSON BOYD: Oh, Steve, did  
7                   you have something you wanted to say?

8                   MR. McCLARY: Well, I guess just  
9                   generally, I think, on the studies that we're  
10                  considering. I think reading scientific studies  
11                  too narrowly isn't really merited.

12                 Certainly, you know, governmental  
13                 studies like the GAO reports and things like that,  
14                 those are certainly part of the set of documents  
15                 and studies that we're going to be reviewing. So,  
16                 I don't want to have too much read into the word  
17                 scientific there.

18                 And then on decommissioning and low-  
19                 level waste issues, those are certainly part of  
20                 the cost of running the existing plants, and  
21                 ultimately of waste disposal and can't be ignored.  
22                 And, in fact, I think we've highlighted some of  
23                 those issues, particularly on the low-level waste  
24                 and pending shortage in previous work here at the  
25                 Commission. And the Commission has raised that

1 and been concerned about it.

2 I won't say that we'll solve it in the  
3 course of this assessment, but we're certainly  
4 aware of it.

5 VICE CHAIRPERSON BOYD: Okay, thank you  
6 for those comments.

7 I have no more blue cards. Is there  
8 anyone on the phone who wanted to comment?

9 Is there anyone in the audience who  
10 would like to say anything, make any comments to  
11 us?

12 Well, if not, I'd therefore like to  
13 thank all of you for being here today, for  
14 commenting on the draft study plan. And we'll  
15 certainly take into account all of you comments,  
16 written and oral, in finally scoping out the work  
17 that we're going to carry out.

18 We look forward to seeing many of you  
19 again in the workshops I know we will have on this  
20 topics in the future.

21 So, thank you, all. Happy holidays.  
22 This meeting stands adjourned.

23 (Whereupon, 10:53 a.m, the Commission  
24 Workshop was adjourned.)

25 --o0o--



## CERTIFICATE OF REPORTER

I, PETER PETTY, an Electronic Reporter,  
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